API NUMBER: 017 25219

Oil & Gas

Horizontal Hole

OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION P.O. BOX 52000 OKLAHOMA CITY, OK 73152-2000 (Rule 165:10-3-1)

Approval Date: 05/01/2018
Expiration Date: 11/01/2018

PERMIT TO DRILL

WELL LOCATION: Sec: 05 Twp: 12N Rge: 8W County: CANADIAN

SPOT LOCATION: SE SE SW SW FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: **285 1110**

Lease Name: THIS GUY 5-12N-8W Well No: 2MH Well will be 285 feet from nearest unit or lease boundary.

Operator PALOMA OPERATING CO INC Telephone: 7136508509 OTC/OCC Number: 23932 0

PALOMA OPERATING CO INC 1100 LOUISIANA ST STE 5100

HOUSTON. TX 77002-5220

JOHN L PORTER REVOCABLE TRUST

8 SPRING CREEK DR

DENISON TX 75020

Formation(s) (Permit Valid for Listed Formations Only):

Name Depth Name Depth MISSISSIPPI 10801 1 6 2 7 3 8 4 9 10 208347 Spacing Orders: Location Exception Orders: Increased Density Orders:

Pending CD Numbers: 201802169 Special Orders:

201803098

Total Depth: 15975 Ground Elevation: 1395 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 320

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

PIT 1 INFORMATION Approved Method for disposal of Drilling Fluids:

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED
Chlorides Max: 5000 Average: 3000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N

Wellhead Protection Area? N

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is NON HSA

Pit Location Formation: DOG CREEK

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 18-33875

H. SEE MEMO

PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED
Chlorides Max: 300000 Average: 200000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N
Wellhead Protection Area? N

Pit is not located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C
Pit Location is NON HSA

Pit Location Formation: DOG CREEK

HORIZONTAL HOLE 1

Sec 05 Twp 12N Rge 8W County CANADIAN

Spot Location of End Point: NE NE NW NW
Feet From: NORTH 1/4 Section Line: 65
Feet From: WEST 1/4 Section Line: 1140

Depth of Deviation: 10488
Radius of Turn: 526
Direction: 355
Total Length: 4660

Measured Total Depth: 15975

True Vertical Depth: 10966

End Point Location from Lease,
Unit, or Property Line: 65

Notes:

MEMO

Category Description

DEEP SURFACE CASING 4/20/2018 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF

CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR

SURFACE CASING

HYDRAULIC FRACTURING 4/20/2018 - G71 - OCC 165:10-3-10 REQUIRES:

1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE:

2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE

"FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK:

OCCEWEB.COM/OG/OGFORMS.HTML; AND,

3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG

4/20/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201802169 4/27/2018 - G56 - (I.O.) 5-12N-8W

X208347 MISS

COMPL INT NCT 165' FSL, NCT 165' FNL, NCT 330' FWL

NO OP NAMED REC 4/9/18 (NORRIS) Category Description

PENDING CD - 201803098 4/27/2018 - G60 - 5-12N-8W X208347 MISS

X208347 MISS 1 WELL NO OP. NAMED HEARING 5/7/18

SPACING - 208347 4/27/2018 - G56 - (640) 5-12N-8W

EST. MISS

35-017-25219

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS CANADIAN County, Oklahoma 285'FSL-1110'FWL_Section __5__Township <u> 12N</u> Range <u>8W</u>I.M. T13N-R8W 3rd STANDARD PARALLEL NORTH Township Line P T12N-R8W X 1981909 Y 200655 X 1976641 Y 200653 X 1978008 1979324 200651 LOT 3 X 1980630 Y 200653 Y 200653 PROPOSED LAST TAKE POINT PROPOSED BOTTOM HOLE 65'FNL-1140'FWL 35'33'03.7" N 98'04'28.9" W 35.551026119' N 165'FNL-1140'FWL 35'33'02.7" N 98'04'28.9" W LOT 2 LOT 1 35.550751396° N 98.074688980° W X: 1977781 98.074690051 W 200488 1977781 200588 PATH DRILL S/2-NW/4 S/2-NE/4 ROPOSED -N-5 5 X 1981913 Y 198108 1981913 X 197604 Y 198090 1976647 NAD-27 OK NORTH US FEET Scale: 1" = 1000' EXISTING WEL EXISTING WELL
710'FSL-510'FWL
PLOTTED PER OCC RECORD
(API: 017-23951A)
NOT SURVEYED IN FIELD 2353 1000' PROPOSED FIRST TAKE POINT 550'FSL-1140'FWL 35'32'18.4" N 98'04'28.7" W 35.538438667' N PROPOSED SURFACE HOLE 285'FSL-1110'FWL NAD-83 (US FEET) + ±6.30° 0 98.074641279 35'32'15.9" N 98'04'30.3" W 1977792 196006 X 1981918 Y 195473 1525 X 1979286 Y 195462 X 1976654 Y 195452 285 NOTES: THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY.
FIRST TAKE POINT, LAST TAKE POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.
DISTANCE SHOWN FROM EXISTING WELL TO DRILL PATH IS CALCULATED **ELEVATION:** AND NOT SURVEYED IN THE FIELD. Operator: PALOMA OPERATING COMPANY, INC. 1396' Gr. at Stake (NAVD 88) Lease Name: __THIS GUY 5-12N-8W 1395' Gr. at Stake (NGVD 29) Well No.: 2MH Topography & Vegetation ____Loc. fell in sloped wheat field Reference Stakes or Alternate Location Good Drill Site? ___ Yes Stakes Set _ From South off county road Best Accessibility to Location __ Distance & Direction From the junction of US Hwy 270N & I-40 E-W, South of Calumet, Oklahoma, go from Hwy Jct or Town ± 0.5 mile North on US Hwy 270, then ± 2 miles East to the Southwest Corner of Section 5, T12N-R8W, Revision X A Date of Drawing: Mar. 22, 2018 DATUM: NAD-27 Invoice # 290917A Date Staked: <u>Jan. 24, 2018</u> LAT: <u>35'32'15.8"</u> N LONG: 98'04'29.1" W **CERTIFICATE:** d with a GPS refoot Horiz./Vert. c LAT: 35.537710259° N SURVE Thomas L. Howell ED LONG: 98.074739526° W _an Oklahoma Licensed Land THOMAS L Surveyor and an authorized agent of Topographic Land HOWELL STATE PLANE Surveyors of Oklahoma, do hereby certify to the 1433 COORDINATES (US FEET): information shown herein. This ered ±1 fo VALAHOMA OTT ZONE: OK NORTH X: 1977763 195741

Oklahoma Reg. No. ___1433

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 WIRELESS WAY, OKLA, CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. 1293 LS CANADIAN County, Oklahoma 285'FSL-1110'FWL 5 <u> 12N</u> Range <u>8W</u>I.M. _ Section Township 3rd STANDARD PARALLEL NORTH T13N-R8W Township Line T12N-R8 1981909 197664 LOT 200653 200651 ROPÓSED AST TAKE POINT 165'FNL-1140'FWL 35'33'02.7" N 200653 OTTOM HOLE 5'FNL-1140'FWL 5'33'03.7" N 550751396° N 98'04'28.9" W 8 074688980° W 551026119 1977781 200488 98 074690051° W S/2-NW/4 197664 GRID NAD-27 OK NORTH US FEET Scale: EXISTING WELL 1" = 1000 710'FSL-510'FWL PLOTTED PER OCC RECORD (API: 017 NOT SURV 1000 PROPOSED FIRST TAKE POINT 550'FSL-1140'FWI 35'32'18.4" N 98'04'28.7" W 35.538438667* 98.074641279° X: 1977792 196006 X 1976654 1981918 Y 195452 195462 NOTES: THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY.

FIRST TAKE POINT, LAST TAKE POINT, BOTTOM HOLE AND DRILL PATH INFORMATION PROVIDED BY OPERATOR LISTED, NOT SURVEYED.

DISTANCE SHOWN FROM EXISTING WELL TO DRILL PATH IS CALCULATED AND NOT SURVEYED IN THE FIELD. **ELEVATION:** Operator: PALOMA OPERATING COMPANY, INC. 1396' Gr. at Stake (NAVD 88) Lease Name: ___THIS GUY 5-12N-8W Well No.: 2MH 1395' Gr. at Stake (NGVD 29) Topography & Vegetation <u>Loc. fell in sloped</u> wheat field Reference Stakes or Alternate Location Good Drill Site? _____Yes None Stakes Set _ From South off county road Best Accessibility to Location ___ Distance & Direction From the junction of US Hwy 270N & I-40 E-W, South of Calumet, Oklahoma, go from Hwy Jct or Town _ ± 0.5 mile North on US Hwy 270, then ± 2 miles East to the Southwest Corner of Section 5, T12N-R8W. Revision X A Date of Drawing: Mar. 22, 2018 DATUM: NAD-27 Invoice # <u>290917A</u> Date Staked: <u>Jan. 24</u>, <u>20</u>18 LAT: <u>35°32</u>'15.8" N LONG: 98°04'29.1" W **CERTIFICATE:** LAT: 35.537710259° N Thomas L. Howell LONG: 98.074739526' W __an Oklahoma Licensed Land SURVE Surveyor and an authorized agent of Topographic Land STATE PLANE Surveyors of Oklahoma, do hereby certify to the COORDINATES (US FEET): information shown herein. ZONE: OK NORTH LAHOMA SOLI

Oklahoma Reg. No. 1433

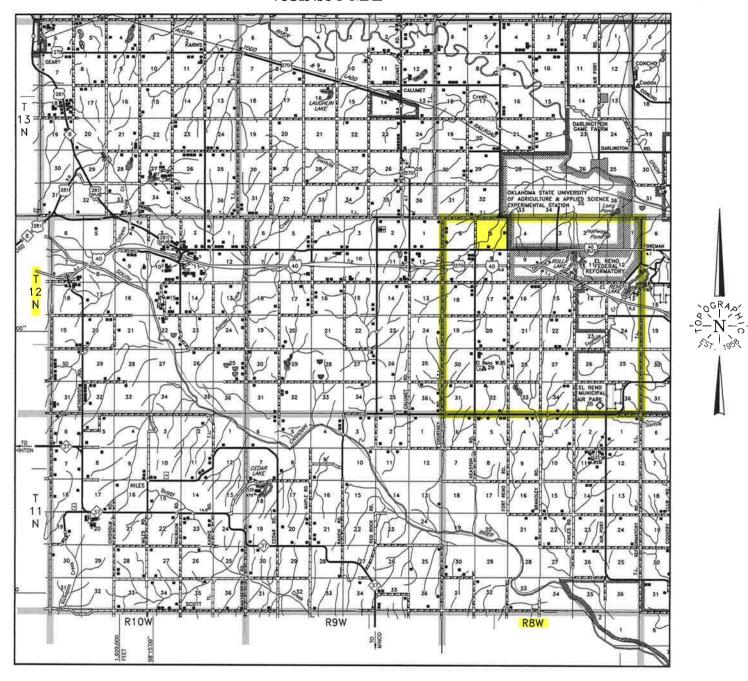
was receiver accuracy. d with a GPS of foot Horiz./Vert.

X: 1977763 195741

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry 13800 Wireless Way Oklahoma City, OK 73134 www.topographic.com Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

VICINITY MAP



Scale: 1" = 3 Miles

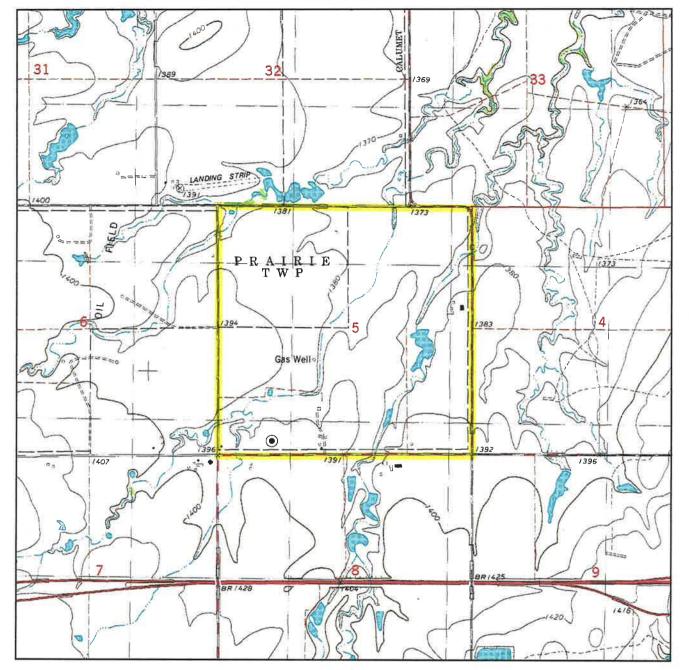
Sec. 5	Twp	12NRng.	8W .M.
County	CANADIAN	State	OK
Operator_	PALOMA O	PERATING CO	MPANY, INC.



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LOCATION & ELEVATION VERIFICATION MAP



Sec. 5 Twp. 12N Rng. 8W I.M.

County CANADIAN State OK

Operator PALOMA OPERATING COMPANY, INC.

Description 285'FSL-1110'FWL

Lease THIS GUY 5-12N-8W 2MH

1396' Gr. at Stake (NAVD 88)
Elevation 1395' Gr. at Stake (NGVD 29)

Above Background Data from U.S.G.S. Topographic Map Scale: 1"=2000'

Contour Interval ____ 10'

When elevation is shown hereon it is the ground elevation of the location stake. Review this plat and inform us immediately of any possible discrepancy.



LAND SURVEYORS OF OKLAHOMA